



**TOOL MODEL: ICE 3**

**PRESSURE/TORQUE CONVERSION CHART**

**Standard Torque Chart**

<b>PRESSURE IN PSI</b>	<b>FT.LBS.</b>	<b>TORQUE IN KGM</b>	<b>NM</b>	<b>PRESSURE IN BAR</b>
1500	460	64	623	104
1600	491	68	666	110
1800	555	77	752	124
2000	618	85	838	138
2200	680	94	922	152
2400	742	103	1006	165
2600	804	111	1090	179
2800	866	120	1175	193
3000	929	128	1259	207
3200	992	137	1344	220
3400	1054	146	1429	234
3600	1117	155	1515	248
3800	1180	163	1600	262
4000	1243	172	1685	276
4200	1305	180	1769	290
4400	1367	189	1853	303
4600	1429	198	1937	317
4800	1490	206	2020	331
5000	1552	215	2104	345
5200	1615	223	2189	358
5400	1677	232	2274	372
5600	1740	241	2359	386
5800	1802	249	2443	400
6000	1865	258	2528	414
6200	1927	266	2612	427
6400	1988	275	2695	441
6600	2050	284	2779	455
6800	2112	292	2863	468
7000	2173	301	2946	482
7200	2234	309	3029	496
7400	2296	317	3112	510
7600	2357	326	3195	524
7800	2418	334	3278	538
8000	2479	343	3361	552
8200	2541	351	3444	565
8400	2602	360	3527	579
8600	2664	368	3611	593
8800	2725	377	3694	607
9000	2787	385	3777	620
9200	2846	394	3858	634
9400	2905	402	3939	648
9600	2965	410	4019	662
9800	3024	418	4100	676
10000	3084	426	4180	690

## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** Your **HYTORC TORQUE MACHINE** is a power tool, and as with any power tool, certain safety precautions should be observed to avoid accidents or personal injury. The following tips will assist you.

- **READ ALL INSTRUCTIONS.**
  - **KEEP WORK AREA CLEAN AND WELL LIT.**
  - **CONSIDER WORK AREA ENVIRONMENT.** Electrical Pumps should never be used in an atmosphere which can be considered potentially volatile. If there is any doubt, use an air pump. Also Note: metal to metal contact can cause sparks, precautions should be taken.
  - **AVOID PREMATURE TOOL STARTING.** The Pump Remote Control is for the **TOOL OPERATOR** only.
  - **STAY CLEAR DURING OPERATION.** In most cases, the tool will allow “hands free” operation. If the tool must be held or steadied during operation, use alternative means of securing the tool to the application
  - **GUARD AGAINST ELECTRIC SHOCK.** Ensure the pump is properly grounded and the proper voltage is being used
  - **STORE IDLE TOOLS.** When not in use, tool and accessories should be properly stored to avoid deterioration
  - **USE RIGHT TOOL.** Don't force small tools or attachments to do the job of a larger tool. Don't use a tool for purposes not intended.
  - **PROPER SAFETY ATTIRE.** When handling/operating hydraulic equipment use work gloves, hard hats, safety shoes and other applicable clothing.
  - **USE SAFETY GLASSES.**
  - **MOVING EQUIPMENT.** Do not use hydraulic hoses, uni-swivels, pump power or remote cords as means of moving the equipment.
  - **MAINTAIN TOOLS WITH CARE.** For top performance, inspect tools, powerpack and accessories for visual damage frequently and always prior to use. Always follow instruction for proper tool and pump maintenance. Refer to the Operations Maintenance Section for further clarification
  - **STAY ALERT.** Watch what you are doing. Use Common sense. Do not use power equipment under the influence of any mood altering substances.
  - **PRIOR TO OPERATION**
    - Ensure that all hydraulic connections are securely connected and there is no leakage
    - Verify that the Hydraulic hoses are not kinked or otherwise damaged.
    - Ensure the square drive and its retainer are fully and securely engaged.
    - Be certain that all connectors, elbows, fitting and swivels are not bent, loose or damaged.
  - **PRIOR TO USE.**
    - Check sockets for size, quality and flaws. (Do not use if questionable)
    - Cycle tool to ensure proper function.
    - Locate a solid, secure reaction point.
    - Be sure the reaction arm retaining clamp is fully engaged.
    - Be sure the hydraulic hoses are free of the reaction point.
    - Pressurize the system momentarily; if the tool tends to “ride up” or to “creep”, stop and re-adjust the reaction arm to a more solid and secure position.
- NOTE:** Remain clear of the reaction arm during operation and never put body parts between reaction arm and reaction surfaces.
- **ALWAYS USE QUALITY ACCESSORIES.** Always use top quality impact sockets in good condition which are the correct size and fully engage the nut. Hidden flaws, however, remain a possibility which could cause breakage, so stay clear of sockets during operation
  - **DO NOT USE** other equipment to enhance performance (Hammer on Socket/Tool)**NOTE:** Hytorc Pumps are designed to operate Hytorc Tools only. Damage may occur to the pump or the product that is being operated due to misuse.

**SAVE THESE INSTRUCTIONS FOR FUTURE USE!**